

REPORT 1

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SECURITY INFORMATION

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1. One of the departments at the Army Research Institute (VTU) in Prague is engaged in research on the reaction of light selenium photocells. A phase of this research is on a measuring amplifier for a frequency band up to 800 cycles/second with maximum amplification of 105X and having a diode stage. The input voltage is indicated by a microammeter (i.e., vacuum tube voltmeter for low frequencies). Dr. Ing. Antonin Vasko, Chief of the Prague II branch of the Institute, is in charge of this work.
2. Dr. Vasko's section is concerned principally with the study of infra-red rays. The so-called "sniper-scopes" apparatus for visibility in darkness which is being constructed there is intended to replace the usual lighting system on military cars, and also to be used by snipers.
3. There were two special problems concerning this "sniper-scopes":
 - a. It was necessary to design the smallest possible components, especially power-pack and high voltage supply.
 - b. The Nife battery voltage had to be "stepped up" to 7,000 volts D.C.

The first problem was solved by using special steel for transformer laminations and by special winding of the transformer coil in order to obtain a very small unit without internal electrical breakage at peak voltages. Here it also became necessary to determine the problem of insulating material between the coils. The second problem of "stepping up" the voltage was solved in the following way: The 2.4 volts from the battery are first transformed to A.C. voltage by means of a vibrator and then are fed into the transformer, resulting in an output of 2,000 volts A.C. This high tension is rectified by dry rectifiers and by a cascade voltage multiplier of current type with condensers, stepped up to approximately 7,000 volts D.C. All alternating current components are smoothed out by simple filter (R.C. filter), and the dimensions of the vibropack without battery are approximately 170 x 100 x 70 mm.

4. The name of the head of the Army Research Institute is not known. The chief of the 3rd Research Department is a Col. Ing. Svec.

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The secretary to Dr. Vasko is a Miss Burianova.

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5. Every visitor to the Institute is required to produce an identity card to which his photograph is affixed. This card is kept by the guard at the entrance [redacted] for the duration of the visit. 50X1-HUM
Upon entering, the visitor is given a pass on which are noted the time of his arrival, his name and address, and the name and the room number of the person he wishes to see. The latter then signs the pass on departure of the visitor and records the time, and [redacted] when the visitor hands over the pass to the guard, he is allowed to leave the building.

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